

What is claimed is:

1. An optical recording apparatus comprising:
a light source for generating a light spot used for
information recording;

detection means of detecting an aberration amount of the
light spot or a signal associated with the aberration amount;
and

control means of controlling an output of the light source
by use of the detected aberration amount or the associated signal.

2. An optical recording apparatus according to claim 1,
wherein said detection means detects the detected aberration
amount as an aberration detection signal S , and wherein said
control means controls the output of the light source so that,
when the output of the light source necessary for the recording
under a condition where $S=0$ is P_0 , the output is $P_0/(1-K \cdot S^2)$
for a predetermined constant K .

3. An optical recording apparatus according to claim 1,
wherein said aberration amount is substantially a spherical
aberration amount and/or a coma aberration amount.

4. An optical recording apparatus according to claim 3,
wherein said detection means is capable of detecting the
spherical aberration amount and the coma aberration amount, and
outputs the spherical aberration amount as a spherical aberration
detection signal S_1 and outputs the coma aberration amount as
a coma aberration detection signal S_2 , and wherein said control

means controls the output of the light source so that, when the output of the light source necessary for the recording under a condition where $S_1=S_2=0$ is P_0 , the output is $P_0/(1-K \cdot (S_1^2+S_2^2))$ for a predetermined constant K .

5. An optical recording apparatus according to claim 3, wherein said information recording is performed on an optical disk, wherein said detection means detects and outputs a tilt amount of the optical disk as the signal associated with the aberration amount, and wherein the coma aberration amount is calculated based on a predetermined relationship that holds between the coma aberration amount and the tilt amount.

6. An optical recording apparatus according to claim 2, wherein said information recording is stopped when $1/(1-K \cdot S^2) > 1.5$.

7. An optical recording apparatus according to claim 1, wherein said detection means detects the detected aberration amount as an aberration detection signal S , and wherein when the aberration detection signal and the output of the light source obtained by initial learning in the recording are S_i and P_i , respectively, said control means controls the output of the light source so that the output is $P_i(1-K \cdot S_i^2)/(1-K \cdot S^2)$ for a predetermined constant K .

8. An optical recording method of controlling a light source for generating a light spot used for information recording, said method comprising:

a detection step of detecting an aberration amount of the light spot or a signal associated with the aberration amount; and

a control step of controlling an output of the light source by use of the detected aberration amount or the associated signal.

9. A program for causing a computer to function as all or part of the control means of the optical recording apparatus according to any one of claims 1 to 7.

10. A program for causing a computer to perform all or part of the control step of the optical recording method according to claim 8.

11. A medium carrying a program for causing a computer to function as all or part of the control means of the optical recording apparatus according to any one of claims 1 to 7, said medium being computer-processable.

12. A medium carrying a program for causing a computer to perform all or part of the control step of the optical recording method according to claim 8, said medium being computer-processable.